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antibody and ELISA experts

BOSTER BIOLOGICAL TECHNOLOGY
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Anti-VEGF Antibody

Catalog Number: A00045-4

About VEGFA

Non-receptor tyrosine kinase involved in various processes such as cell growth, development, differentiation or histone modifications. Mediates essential signaling events in both innate and adaptive immunity. In the cytoplasm, plays a pivotal role in signal transduction via its association with type I receptors such as growth hormone (GHR), prolactin (PRLR), leptin (LEPR), erythropoietin (EPOR), thrombopoietin (THPO); or type II receptors including IFN-alpha, IFN-beta, IFN-gamma and multiple interleukins. Following ligand-binding to cell surface receptors, phosphorylates specific tyrosine residues on the cytoplasmic tails of the receptor, creating docking sites for STATs proteins. Subsequently, phosphorylates the STATs proteins once they are recruited to the receptor. Phosphorylated STATs then form homodimer or heterodimers and translocate to the nucleus to activate gene transcription. For example, cell stimulation with erythropoietin (EPO) during erythropoiesis leads to JAK2 autophosphorylation, activation, and its association with erythropoietin receptor (EPOR) that becomes phosphorylated in its cytoplasmic domain. Then, STAT5 (STAT5A or STAT5B) is recruited, phosphorylated and activated by JAK2. Once activated, dimerized STAT5 translocates into the nucleus and promotes the transcription of several essential genes involved in the modulation of erythropoiesis. In addition, JAK2 mediates angiotensin-2-induced ARHGEF1 phosphorylation. Plays a role in cell cycle by phosphorylating CDKN1B. Cooperates with TEC through reciprocal phosphorylation to mediate cytokine-driven activation of FOS transcription. In the nucleus, plays a key role in chromatin by specifically mediating phosphorylation of 'Tyr-41' of histone H3 (H3Y41ph), a specific tag that promotes exclusion of CBX5 (HP1 alpha) from chromatin.

Saltzman A., Biochem. Biophys. Res. Commun. 246:627-633(1998).
Dalal I., Blood 91:844-851(1998).
Peeters P., Blood 90:2535-2540(1997)

Overview

Product Name	Anti-VEGF Antibody
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-VEGF Antibody catalog # A00045-4. Tested in ICC/IF,IHC,Flow Cytometry applications. This antibody reacts with Human,Mouse,Rat.
Application	Flow Cytometry, IF, IHC, ICC
Clonality	Polyclonal PI9-17
Formulation	Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2
Storage Instructions	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P15692

Technical Details

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Immunogen	Synthesized peptide derived from human Caspase-8 around the phosphorylation site of Y380.
Predicted Reactive Species	Bovine, Chicken
Cross Reactivity	Weakly cross-reacts with dog p53.
Isotype	IgG
Form	Liquid
Concentration	1 mg/ml
Purification	ProA affinity purified
Suggested Dilutions	Dilute the sample so that the expected range of concentrations fall within the detection range of this kit. If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples. Some PubMed article(s) citing the expression level of this target are as follows: Boster Bio's internal QC testing used: ICC/IF: 1:50-1:200 IHC: 1:50-1:200 FC: 1:50-1:100

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Anti-VEGF Antibody (A00045-4) Images

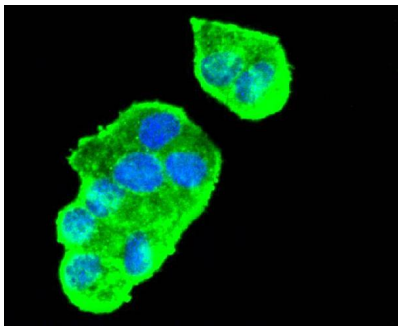

Figure 1. Immunocytochemistry staining of VEGFA using Anti-VEGF Antibody (A00045-4).

ICC staining VEGF in Hela cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde

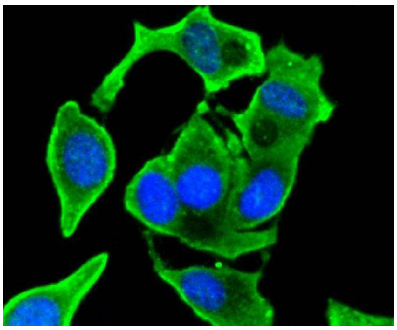

Figure 2. Immunocytochemistry staining of VEGFA using Anti-VEGF Antibody (A00045-4).

ICC staining VEGF in MCF-7 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde

5 Publications Citing This Product

1. PubMed ID: 32503379, Sun S,Li S,Du Y,Wu C,Zhang M,Li J,Zhang X.Anti-inflammatory effects of the root, stem and leaf extracts of Chloranthus serratus on adjuvant-induced arthritis in rats.Pharm Biol.2020 Dec;58(1):528-537.doi:10.1080/13880209.2020.1767159.PMID:32503379.

2. PubMed ID: -, Huilin Guo,Huimin Li,Yaping Feng,Jin Ke,Wei Fang,Cheng Li,Xing Long,Cross-talk between synovial fibroblasts and chondrocytes in condylar hyperplasia: an in vitro pilot study,Oral Surgery,Oral Medicine,Oral Pathology and Oral Radiology,2020,ISSN 2212-4403,

3. PubMed ID: -, Huilin Guo,Huimin Li,Yaping Feng,Jin Ke,Wei Fang,Cheng Li,Xing Long,Cross-talk between synovial fibroblasts and chondrocytes in condylar hyperplasia: an in vitro pilot study,Oral Surgery,Oral Medicine,Oral Pathology and Oral Radiology,2020,ISSN 2212-4403,

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